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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/726,142	11/29/2000	Kevin A. McCullough	P00372-US1	6552

3017 7590 03/14/2003

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EXAMINER

LEE, EDMUND H

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 03/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/726,142

Applicant(s)

MCCULLOUGH ET AL.

Examiner

EDMUND H LEE

Art Unit

1732

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/16/03 has been entered.

2. Claim 10 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for applying a EMI and RF reflective coating about the net part, does not reasonably provide enablement for applying both a metallic coating and a EMI reflective layer about the net part. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The scope of combined claims 9 and 10 is beyond what is enabled by the instant specification. Together claims 9 and 10 can produce a part having both a metallic layer and an EMI reflective layer. The instant specification does not enable a person to make and use a part having both layers.

3. Claims 9-10 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim introduces

Art Unit: 1732

new matter into the disclosure. The added material which is not supported by the original disclosure is as follows:

a) the phrase "providing...a heat generating object" (cl 9, lns 8-9) lacks support in the instant disclosure because its scope conflicts with the step of injection molding a part having a net shape. The phrase allows for additional shaping steps after the injection molding step.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP407106784A in view of Eriksson (USPN 6200630). In regard to claim 9, JP407106784A teaches the basic claimed process including a method of forming a thermally conductive part (abstract; fig 1); providing a base thermoplastic polymer matrix (abstract; fig 1); mixing a thermally conductive filler material into the base thermoplastic polymer matrix to form a thermally conductive composite material (abstract; fig 1); injection molding a part from the thermally conductive composite material into a net shape molded configuration (abstract; fig 1); providing a contact surface for flush thermal communication with a heat generating object (abstract; fig 1)-- as a note, the enclosure of JP407106784A has a surface that can be in contact with a heat generating object; and attaching a metallic plate to the part in order to shield against EM radiation (abstract; fig 1). As a note, the enclosure of JP407106784A

Art Unit: 1732

inherently dissipates heat away from a heat generating object. However, JP407106784A does not teach applying a metallic coating over the part. Eriksson teaches a process for applying a metallic coating to a surface in order to shield against EM radiation (col 1, ln 5-col 3, ln 25); and using a metallic coating applied by a tampon pad printing/coating method instead of a metallic film/plate (col 1, ln 5-col 3, ln 25)--as a note, Eriksson teaches that tampon pad printing/coating is more cost efficient than using a metallic film/plate. JP407106784A and Eriksson are combinable because they are analogous with respect to shielding EM radiation. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the metallic plate of JP407106784A with a metallic coating formed by the process of Eriksson in order to reduce manufacturing costs without sacrificing EM radiation shielding performance. In regard to providing an EM interference reflective layer, such is taught by the combination of JP407106784A and Eriksson.

6. Applicant's arguments with respect to claims 9 and 10 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDMUND H LEE whose telephone number is 703.305.4019. The examiner can normally be reached on MONDAY-THURSDAY FROM 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAN H SILBAUGH can be reached on 703.308.3829. The fax phone numbers for the organization where this application or proceeding is assigned are

Art Unit: 1732

703.305.7718 for regular communications and 703.305.3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0661.



EDMUND H LEE 3/10/03
Examiner
Art Unit 1732

EHL
March 10, 2003